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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,243	11/25/2003	Ronald S. Cok	87288AJA	6656

7590 08/09/2005

EXAMINER	
PATEL, ASHOK	

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ART UNIT	PAPER NUMBER
2879	

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/722,243	COK, RONALD S.	
	Examiner	Art Unit	
	Ashok Patel	2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 November 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *031705*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. Although the Examiner considers the co-pending application Serial Number 10/785,825 (as listed on PTOL-1449, filed on 03/17/2005) for action on merits, it is crossed-out from the PTOL-1449, since it does not constitute a published prior art document.

2. Figures 2, 5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the

art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-10 and 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamashita et al (USPN 5,124,204) in view of Wu et al (USPN 6,876,148).

Yamashita et al disclose applicant's claimed electroluminescent (EL) display including: a substrate (2); one or more electroluminescent light emitting elements (5) including a first electrode (3) formed on the substrate, one or more electroluminescent light emissive layers located over the first electrode, and a second electrode (7) located over the electroluminescent light emissive layers, and an encapsulating cover (13) located over the second electrode and affixed to the substrate; wherein cover includes a composite of a non-metallic layer (22) and a metal layer (21), where the metal layer has a thickness between 5 to 50 microns (col. 2, line 40), which satisfies applicant's claimed range of 1 micron to 1,000 microns and is thinner than the non-metallic layer (two combined layers of element 22).

Yamashita et al does not disclose the display device including organic electroluminescent light emitting layer, as claimed by applicant. Instead, Yamashita et al disclose the display device including inorganic electroluminescent light

emitting layer. Although electroluminescent device including electroluminescent layer of organic or inorganic is known in the art for emitting light, Wu et al is cited for showing an electroluminescent display device (Figs. 1, 5) including organic electroluminescent layer (133) for emitting light from the device.

Therefore, it would have been obvious to one of ordinary skill in the art to provide Yamashita et al's device including organic electroluminescent material as taught by Wu et al for emitting light.

As to claim 2, Yamashita et al disclose the non-metallic layer including plastic (polyester film, col. 2, lines 36-44)

As to claim 3, Yamashita et al disclose the metal layer including aluminum (col. 2, line 39-40).

Yamashita et al do not disclose the device including a heat sink as claimed by applicant. Wu et al disclose the organic EL device including heat sink (12) for drawing heat out from the device during operation. The heat sink could be provided suitably appropriately within an apparatus for drawing heat out from the device during operation.

Therefore, it would have been obvious to one of ordinary skill in the art to provide Yamashita et al's device including the heat sink affixed appropriately as taught by Wu et al for emitting light.

As to claim 5, since the use of EL device in an apparatus is known in the art for illuminating the apparatus, one of ordinary skill in the art would have obviously installed Yamashita et al's device suitably within any apparatus for illuminating the apparatus. One of ordinary skill in the art would further modify the heat drawing arrangement from the device during operation.

As to claim 6, Yamashita et al disclose the composite encapsulating cover formed by first forming a glass or plastic layer and depositing a metal layer upon the plastic.

As to claim 7, swapping locations of the metal layer and plastic within the composite cover would be obvious to one of ordinary skill in the art for providing same encapsulating cover. Locations of the metal layer and plastic would have same encapsulating effect within the cover.

As to claim 8, Yamashita et al discloses the encapsulating cover made of a plastic layer, a metal layer and again a plastic layer. Further, as mentioned earlier, providing a suitable form of heat drawing device would have obvious to one of ordinary skill in the art to maintain low temperature of the device during operation.

As to claim 9, applicant is claiming the process of forming different elements within the device one after other, which renders the claim of product-by-process nature.

The courts have been holding that: "--In spite of the fact that a product-by-process claim may recite only process limitations, it is the product which is covered by the claim and not the recited process steps.-- In re Hughes, 182 USPQ 106--". Also --Patentability of a claim to a product does not rest merely on a difference in the method by which that product is made. Rather, it is the product itself, which must be new and unobvious. In re Pilkington, 162 USPQ 147--." Accordingly, "--a rejection based on 35 U.S.C. section 102 or alternatively on 35 U.S.C. section 103 of the statute is eminently fair and acceptable." In re Brown and Saffer, 173 USPQ 685 and 688. --The determination of the patentability of product-by-process claim is based on the product itself rather than on the process by which the product is made--. In re Thrope, 777 F.2d 695, 227 USPQ 964 (Fed. Cir. 1985).

As such, **no** patentable weight is given to process steps recited in claim 9.

As to claim 10, applicant is claiming the metal layer non-contiguous. However, providing the metal layer of any suitable form would be obvious to one ordinary skill in the art for the

encapsulating cover, since any suitable configuration would provide the same encapsulating effect.

As to claim 12, the metal layer of Yamashita et al's device is also part of a flexible composite cover since cover is made of plastic and plastic is flexible in nature.

As to claim 13, Yamashita et al disclose the metal layer located between (inner) plastic and the second electrode (7).

As to claim 14, Yamashita et al disclose the (outer) plastic located between the metal layer and the second electrode (7).

As to claims 15 and 16, Yamashita et al do not disclose the non-metallic layer made of a glass layer. However, since both glass and plastic are obvious alternatives for encapsulating the device, it would have been matter of obvious alternative design choice to one of ordinary skill in the art to choose either any suitable glass or plastic for encapsulating the device.

As to claim 17, Yamashita et al disclose the metal layer made of aluminum.

As to claims 18 and 19, Yamashita et al's device would act as a barrier layer or would reduce electromagnetic intereference (as claimed by applicant) since these are the intrinsic properties of the metal. Alternatively, the limitations "the metal layer acts as a barrier layer for preventing passage of gas or liquid through the substrate" and "reduces electromagnetic intereference" are

functional limitations and do not contribute positive structure and are therefore not given any patentable weight.

As to claim 20, Yamashita et al disclose the metal layer having thickness between 5 microns and to 50 microns (col. 2, line 40), which satisfies applicant's claimed range of 5 microns to 500 microns.

5. Claims 11 rejected under 35 U.S.C. 103(a) as being unpatentable over Yamashita et al (USPN 5,124,204) in view of Wu et al (USPN 6,876,148) and further in view of Antoniadis et al (USPN 6,366,017).

As to claim 11, Yamashita et al do not disclose the metal layer as part of a flexible composite substrate, as claimed by applicant.

Antoniadis et al is cited for showing an OLED (Figure 2) including a metal layer (32) associated with a flexible plastic substrate (30 col. 2, line 35-38). A composite of the metal layer and flexible substrate would enhance substrate structure. Therefore, it would have been obvious to one of ordinary skill in the art to provide Yamashita et al's device including Wu et al's organic EL layer for emitting light and including the metal substrate composite as taught by Antoniadis et al for enhancing the substrate structure.

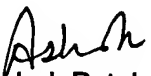
6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tanaka, Suzuki et al, King et al, Ikoma et al, and Lee et al each are cited for showing a general structure of an electroluminescent device including encapsulating cover.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok Patel whose telephone number is 571-272-2456. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ashok Patel
Primary Examiner
Art Unit 2879